

# Notice of Allowability

Application No.

10/634,867

Examiner

Khanh B. Duong

Applicant(s)

KONG ET AL.

Art Unit

2822

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed on March 12, 2007.
2. ☒ The allowed claim(s) is/are 13,16-22,24-33,44 and 47-52.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 09/837,374.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Mary Wilczewski  
Primary Examiner

**DETAILED ACTION**

***Response to Amendment***

This Office Action is in response to the amendment filed on March 12, 2007.

Accordingly, claim 13 was amended.

Currently, claims 13, 16-22, 24-33, 44 and 47-52 remain pending.

***Allowable Subject Matter***

Claims 13, 16-22, 24-33, 44 and 47-52 are allowed.

The following is an examiner's statement of reasons for allowance: none of the prior art of record, taken alone or in combination, fairly shows or suggests all the limitations as claimed.

Re claim 13, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: forming a contact hole extending through the insulating layer and exposing the aluminum or aluminum alloy material of the gate pad; performing an annealing process; depositing using a sputtering process a third conductive layer formed of an indium zinc oxide (IZO) layer; and patterning the third conductive layer to form a conductive pattern directly contacting the aluminum or aluminum alloy material of the gate pad in the contact hole, wherein the sputtering process is performed at a temperature below 200° C, wherein the annealing process is performed immediately before depositing the third conductive layer.

Re claim 19, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: forming a contact hole extending through the passivation layer and the gate insulating layer and exposing the aluminum or aluminum alloy material of the gate pad; depositing a third conductive layer formed of an indium

Art Unit: 2822

zinc oxide (IZO) layer over the passivation layer; and patterning the third conductive layer to form a redundant gate pad directly contacting the aluminum or aluminum alloy material of the gate pad through the contact hole.

Re claim 44, none of the prior art of record discloses the following limitations in combination with the rest of the limitations in the claim: forming a contact hole extending through the insulating layer and exposing the aluminum or aluminum alloy material of the gate pad; depositing a third conductive layer formed of an indium zinc oxide (IZO) layer; and patterning the third conductive layer to form a conduction pattern directly contacting the aluminum or aluminum alloy material of the gate pad in the contact hole, further comprising, preheating the passivation layer, the silicon nitride layer and the exposed gate pad before the forming the third conductive layer.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Duong whose telephone number is (571) 272-1836. The examiner can normally be reached on 10:00-6:30 PM.

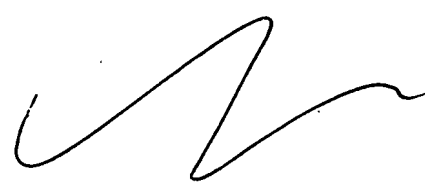
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith, can be reached on (571) 272-2429. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2822

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



KBD



Mary Wilczewski  
Primary Examiner